

Buzz Rules Short Edition

The buzzwords are *buzz*, *bang*, *crash*, *whiz*, *zip*, *pop*, *fibbi*, *sump*, and *squawk*. Not all words are in force from the beginning; the game emcee will say when a word comes into force.

- *Buzz*. The number is a multiple of 7, or one of its digits is a 7.
- *Bang*. The number is a multiple of 5, or one of its digits is a 5.
- *Crash*. The number is *prime*. The primes are the numbers

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, \dots

that cannot be written as the product of two whole numbers, both greater than 1.

- *Whiz*. The number is *squarefree*. It's not divisible by any square other than 1.
- *Zip*. The number is a *power*. That is, the number is got by multiplying some other number times itself more than once.
- *Pop*. The number is the *product of two distinct primes*.
- *Fibbi*. The number is part of the *Fibonacci* sequence. This sequence begins with 0,1 and self-extends by the rule that the next number is the sum of the two that came just before it.
- *Sump*. A sump number is one that is the sum of a square and a cube. Either of these can be zeros, so all squares, as well as all cubes, are sumps, but there are others, such as $5 = 4 + 1$ and $17 = 9 + 8$.
- *Squawk*. A squawk number is one that can be written as the sum of exactly two squares. A square is a number that is got by multiplying a whole number times itself. So 0 is a square, so the squares themselves are squawk numbers. ($9 = 9 + 0$, for instance.) T